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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,740	08/27/2001	Chih-Chin Hsu	BHT-3092-240	2744

7590 09/28/2004
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EXAMINER MOE, AUNG SOE	
ART UNIT 2612	PAPER NUMBER

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,740

Applicant(s)

HSU ET AL.

Examiner

Aung S. Moe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (U.S. 6,628,819) in view of Callari et al. (U.S. 6,529,627).

Regarding claim 1, Huang '819 discloses a passive control system for taking a three dimensional picture (i.e., see Fig. 2), comprising a 2D-3D converting device (i.e., the elements 112/114) with two ends, one of the ends connecting with a digital picture taking apparatus (i.e., noted the camera 108 as shown in Fig. 2) via an interface (i.e., noted from Fig. 2 that the camera 108 is connected with the elements 110-114 via a connection lines, thus, the interface must be

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provided to make a connection there between, and this is further evidenced by Huang '819 in Fig. 12), the other one of the ends connecting with a data processing center (i.e., noted the element 116; see col. 8, lines 5+), providing a preset program to regulate the digital picture taking apparatus with a start of scanning at a preset time (i.e., noted that the system of Huang '819 is capable of providing a preset program to regulate the camera 108 to begin scanning at a preset time; see col. 8, lines 2+ and col. 9, lines 5+);

a rotary disk apparatus, providing a positioning interface to connect with a rotary disk (Fig. 2, the elements 100, 106 and 104), and the rotary disk being able to stay in place after turning a preset angular displace in accordance with the preset program (i.e., it is noted that the turntable 100 is capable of turning a preset angular displace in accordance with the preset program; see col. 8, lines 2+, col. 17, lines 25+ and col. 18, lines 25+); whereby, an object (i.e., the elements 102 as shown in Fig. 2) to be taken a picture is placed on the rotary disk is taken a picture by the digital picture taking apparatus as soon as the rotary disk is turned the preset angular displacement once (i.e., see Figs. 6, 7 and 13); and a 2D signal generated by the digital picture taking apparatus (108/112) is shifted to a 3D signal by way of the 2D-3D converting device (114) for being treated as a 3D image by the data processing center (116).

Furthermore, it is noted that although Huang '819 show the use of an interface between the camera (108) and the other device such as elements 110, 112, 114 and 116 (i.e., see Fig. 12 of Huang '819), Huang '819 does not explicitly state that the interface device is a **shift interface** (i.e., USB port, 1394 port or RS232).

However, the use of a shift interface, such as a USB port, between the camera and the 2D-3D converter device is well known in the art as evidenced by the teaching of Callari '627. In particular, Callari '627 teaches the use of a shift interface (i.e., a USB port; as discussed in col. 4, lines 60-68) between the camera 108 and the 2D-3D converter device (106) as shown in Fig. 2.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Huang '819 as taught by Callari '627 by providing a well known shift interface in order to improve operability thereof.

Regarding claim 3, the combination of Huang '819 and Callari '627 discloses wherein each of the interfaces is a USB port, a 1394 port, or a RS232 port (i.e., see col. 4, lines 50-68 of Callari '627).

Regarding claim 4, the combination of Huang '819 and Callari '627 discloses wherein the data processing center is a CPU/RAM/ROM (i.e., noted the CPU 116 of Huang '819; and Fig. 1B of Callari '627).

Regarding claim 5, it is noted that Huang '819 does not explicitly discussed the use of specific the angular displacement of 30 degrees as recited in present claimed invention. Instead, Huang '819 disclosed that the object is rotated so that all-around view (360 degrees data) of the object shape is taken as a picture (i.e., see col. 18, lines 25+). In view of this, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to select any desire displacement angles to rotate the object by controlling the driver unit (106) of the system of Huang '819, since it has been held that when the general conditions of a claim are disclosed in

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the prior art (i.e., the system of Huang '819), discovering the optimum or workable ranges (i.e., the angular displacement of 30 degrees) involves only routine skill in the art.

Regarding claim 6, the combination of Huang '819 and Callari '627 discloses wherein each interface can use a port commonly or a port respectively (i.e., see Figs. 1 and 12 of Huang '819; and Fig. 1A and 1B of Callari '627).

Regarding claim 7, the combination of Huang '819 and Callari '627 discloses wherein the data processing center is mounted in the control system (i.e., noted that the processing center, such as the memory unit, as shown in Fig. 12 of Huang '819 and Fig. 1B of Callari '627 being mounted in the CPU control system).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang '819 in view of Callari '627 as applied to claims discussed above, and further in view of Miramonti et al (U.S. 5,864,640).

Regarding claim 2, the combination of Huang '819 and Callari '627 does not explicitly show an illumination control device with an illumination interface to connect with at least an illumination device.

However, the above-mentioned claimed laminations are well known in the art as evidenced by Miramonti '640. In particular, Miramonti '640 teaches the use of an illumination

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control device (Fig. 2, the elements 200 and 224) with an illumination interface (224) to connect with at least an illumination device (i.e., Fig. 1B, the element 150).

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Huang '819 as taught by Miramonti '640, since Miramonti '640 state in col. 2, line 30+ such a modification would increase the accuracy of the three dimensional location of the surface points thereof.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

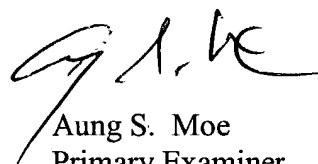
a. Knighton '684, Fujii '405, Kang '468, Katayama '807, Matsumoto '272, Yano '865, Bulman '255 and Okada '964 show a system and method for converting the 2-D images to the 3-D images.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aung S. Moe whose telephone number is 703-306-3021. The examiner can normally be reached on Mon-Fri (9-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aung S. Moe
Primary Examiner
Art Unit 2612

A. Moe
September 20, 2004